

What is claimed is:

1. A computerized method for a system to interpret a numerical data pertaining to a sample assay comprising at least one biological or chemical sample, said numerical data including a set of data pertaining to each respective sample, each of said set of data including a plurality of data values, each representing a condition of said respective sample at a point in time, said method comprising the steps of:

for each set of data, performing the steps of:

representing each of said plurality of data values as points on a graph having a vertical axis representing a magnitude of said plurality of data values and a horizontal axis representing a period of time during which readings of said sample were taken to obtain the plurality of data values;

correcting said plurality of data values based on said magnitude of at least one of said plurality of data values;

reducing said plurality of corrected data values for each set of data values;

determining whether said reduced plurality of data values corresponds to a predetermined reference value; and

controlling said system to indicate whether said sample has a predetermined characteristic based on a result of said determining step.

2. The method as claimed in claim 1, wherein said correcting step includes adjusting said magnitude of at least one of said plurality of data values in relation to said magnitude of adjacent ones of said plurality of data values on said graph.

3. The method as claimed in claim 1, further comprising the steps of:

comparing said plurality of corrected data values to a predetermined threshold value;

and

further correcting said plurality of corrected data values based on whether said plurality of data values exceeds said predetermined threshold value.

4. The method as claimed in claim 3, wherein when said comparing step determines that said plurality of corrected data values exceeds said predetermined threshold value, said controlling step controls said system to indicate that said sample was not present.

5. The method as claimed in claim 1, wherein said reducing step includes combining each of said plurality of corrected data values for each set of data at respective points in time on said graph and calculating a representative value of the plurality of combined corrected data values for use in said determining step.

6. The method as claimed in claim 1, wherein said correcting step includes calculating said correction values based on a plurality of said data values at a beginning of a sequence of said plurality of data values.

7. The method as claimed in claim 1, wherein when said determining step determines that said reduced plurality of data values corresponds to said predetermined characteristic, said controlling step controls said system to indicate that said sample has said predetermined characteristic.

8. The method as claimed in claim 1, wherein when said determining step determines that said reduced plurality of data values does not corresponds to said predetermined characteristic, said controlling step controls said system to indicate that said sample is absent said predetermined characteristic.

9. A computerized method for a system to analyze a numerical data pertaining to a sample assay, comprising at least one biological or chemical sample, said numerical data including a set of data pertaining to each respective sample, each of said set of data including a plurality of data values, each representing a condition of said respective sample at a point in time, said method comprising the steps of:

for each set of data, performing the steps of:

assigning a respective numerical value to each of said plurality of data values;

correcting said plurality of numerical values pertaining to said set of data;
first comparing said corrected plurality of numerical values to a threshold value;
second correcting said plurality of corrected numerical values based on whether said plurality of corrected exceeds said threshold value;
second comparing said plurality of second corrected numerical values to a reference value corresponding to a predetermined assay; and
controlling said system to indicate whether said sample assay has a predetermined characteristic based on the result of said reference value comparison.

10. The method as claimed in claim 9, wherein said assigning step includes the step of arranging said data values in a sequence representative of said respective points in time.

11. The method as claimed in claim 10, wherein said correcting step includes calculating a correction value based on a plurality of said numerical values at a beginning of said sequence.

12. The method as claimed in claim 11, wherein said correcting step further includes adjusting each of the numerical values of the plurality of data values in relation to an adjacent one of said numerical values.

13. The method as claimed in claim 9, wherein said first comparing step includes calculating an average value of said corrected plurality of numerical values and comparing said average corrected numerical value to said threshold value.

14. The method as claimed in claim 9, wherein said second correcting step includes correcting each of said corrected numerical values in relation to an adjacent one of said corrected numerical values.

15. The method as claimed in claim 14, wherein said second correcting step further includes combining respective ones of said plurality of corrected numerical values for each set of data representative of each respective point in time and summarizing said plurality of combined numerical data values to a numerical value representative of said plurality of combined numerical values.

16. The method as claimed in claim 15, wherein said second comparing step includes comparing said numerical value to said reference value.

17. The method as claimed in claim 10, further comprising the step of assigning to each of said data values a respective time value representative of said respective point in time corresponding to said data value.

18. The method as claimed in claim 9, wherein said controlling step controls said system to report whether said corrected plurality of adjusted numerical values exceeds said threshold value.

19. A computer readable medium of instructions for controlling a system to analyze a numerical data pertaining to a sample assay comprising at least one biological or chemical sample, said numerical data including a set of data pertaining to each respective sample, each of said set of data including a plurality of data values, each representing a condition of said respective sample at a point in time, said medium of instructions comprising:

- a first set of instructions, adapted to control said system to represent each of said plurality of data values as points on a graph having a vertical axis representing a magnitude of said plurality of data values and a horizontal axis representing a period of time during which readings of said sample were taken to obtain the plurality of data values;

- a second set of instructions, adapted to control said system to correct said plurality of data values based on said magnitude of at least one of said plurality of data values;

- a third set of instructions, adapted to control said system to reduce said plurality of corrected data values for each set of data values;

a fourth set of instructions, adapted to control said system to determine whether said reduced plurality of data values corresponds to a predetermined reference value; and

a fifth set of instructions, adapted to control said system to controlling said system to indicate whether said sample has a predetermined characteristic based on a result of the determining step.

20. A computer-readable medium as claimed in claim 19, wherein said second set of instructions is further adapted to control said system to adjust a magnitude of at least one of the plurality of data values in relation to a magnitude of adjacent ones of said plurality of data values on said graph.

21. A computer-readable medium as claimed in claim 19, further comprising a sixth set of instructions adapted to control said system to compare said plurality of corrected data values to a predetermined threshold value and to further correct said plurality of corrected data values based on whether said plurality of corrected data values exceeds said threshold value.

22. A computer-readable medium as claimed in claim 21, wherein when said fourth set of instructions determines that said plurality of data values exceeds said predetermined threshold value, said fifth set of instructions controls said system to indicate that said sample was not present.

23. A computer-readable medium as claimed in claim 19, wherein said third set of instructions is further adapted to control said system to combine each of said plurality of corrected data values for each set of data at respective points in time on said graph and to calculate a representative value of the plurality of combined corrected data values for use in said determining step.

24. A computer-readable medium as claimed in claim 19, wherein said fifth set of instructions is further adapted to control said system to report predetermined characteristic based on said determining step.

25. A computer-readable medium as claimed in claim 19, wherein said fifth set of instructions is further adapted to control said system to indicate that said sample has said predetermined characteristic when said determining step determines that said reduced plurality of data corresponds to said predetermined characteristic.

26. A computer-readable medium as claimed in claim 19, wherein said fifth set of instructions is further adapted to control said system to indicate that said sample is absent said predetermined characteristic when said determining step determines that said reduced plurality of data does not corresponds to said predetermined characteristic.

27. A computerized method for a system to interpret a numerical data pertaining to a sample assay comprising at least one biological or chemical sample, said numerical data including a set of data pertaining to each respective sample, each of said set of data including a plurality of data values, each representing a condition of said respective sample at a point in time, said method comprising the steps of:

for each set of data, performing the steps of:

a means for representing each of said plurality of data values as points on a graph having a vertical axis representing the magnitude of said plurality of data values and a horizontal axis representing a period of time during which readings of said sample were taken to obtain the plurality of data values;

a means for correcting said plurality of data values based on said magnitude of at least one of said plurality of data values;

a means for reducing said plurality of corrected data values for each set of data values;

a means for determining whether said reduced plurality of data values corresponds to a predetermined reference value; and

a means for controlling said system to indicate whether said sample has a predetermined characteristic based on a result of the determining step.

28. The method as claimed in claim 27, wherein said correcting means includes a means for adjusting a magnitude of at least one of the plurality of data values in relation to a magnitude of adjacent ones of said plurality of data values on said graph.

29. The method as claimed in claim 27, further comprising the steps of:

a means for comparing said plurality of data values to a predetermined threshold value;
and

a means for further correcting said plurality of corrected data values based on whether said plurality of data values exceeds said predetermined threshold value.

30. The method as claimed in claim 27, wherein when said comparing means determines that said plurality of corrected data values exceeds said predetermined threshold value, said controlling means control said system to indicate that a sample was not present.

31. The method as claimed in claim 27, wherein said reducing means includes a means for combining each of said plurality of corrected data values for each set of data at respective points in time on said graph and a means for calculating a representative value of the plurality of combined corrected data values for use by said determining means.

32. The method as claimed in claim 27, wherein said controlling means controls said system to report said predetermined characteristic based on said determining means.

33. The method as claimed in claim 27, wherein when said determining means determines that said reduced plurality of data corresponds to said predetermined characteristic, said controlling means controls said system to indicate that said sample has said predetermined characteristic.

34. The method as claimed in claim 27, wherein when said determining means determines that said reduced plurality of data does not corresponds to said predetermined characteristic,

said controlling means controls said system to indicate that said sample is absent said predetermined characteristic.